

January, 1999

WATER CONSERVATION AND DROUGHT OR  
WATER SUPPLY EMERGENCY MANAGEMENT PLAN REPORT  
FOR PUBLIC WATER SUPPLY SYSTEMS

PERMITTEE: \_\_\_\_\_

CONTACT PERSON: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE NO. \_\_\_\_\_

ALLOCATION PERMIT NO.: \_\_\_\_\_

DATE: \_\_\_\_\_

Submit to: Bureau of Water Allocation  
P.O. Box 426  
Trenton, New Jersey 08625-0426

See your Water Allocation Permit for your submittal schedule

NOTE: You must read and complete all sections of the worksheet. Your Water Allocation Permit requires water conservation and water management activities that you may not usually consider in this context but no section may be omitted.

Please discard your file copies of the previous worksheets and/or delete or update computerized forms. Your report must be submitted on an exact replica of this worksheet, either a photocopy or a computerized version, with the original kept on file for future reference. An incomplete worksheet will be returned to you. If there is not enough space provided for your information, additional pages should be used.

I. WATER CONSERVATION COMPONENTS

A. WATER SYSTEM

1. Allocation: \_\_\_\_\_ mgm, \_\_\_\_\_ gpm, \_\_\_\_\_ mgy

2. Source:  
number of wells \_\_\_\_\_  
number of surface intakes \_\_\_\_\_  
bulk purchase \_\_\_\_\_ mgd

3. Metering: (circle one)  
raw water source Y N  
finished water Y N  
delivered water Y N

4. Date of last source meter calibration: \_\_\_\_\_

5. System Capacity:  
treatment \_\_\_\_\_ mgd  
delivery \_\_\_\_\_ mgd  
storage \_\_\_\_\_ mg

	Number of Connections	Number of Meters
6. Customer Base		
residential	_____	_____
commercial	_____	_____
industrial	_____	_____
municipal	_____	_____
total	_____	_____

7. Interconnections:  
existing/size \_\_\_\_\_  
under construction \_\_\_\_\_  
planned (5 year) \_\_\_\_\_

use (circle one) bulk, emergency, other (describe)

Agreements for use: Y (give details) N

8. Map or diagram of the system. Submit only once unless there are changes.

## B. ANALYSIS OF WATER USE

1. Demand: Report demand from the most recent year for which you have complete data as the base year; identify the years the data refers to.

	mgd	mgm	mgd	gpm
base year <u>19</u>	_____	_____	_____	_____
previous year <u>19</u>	_____	_____	_____	_____
peak (base year)	_____	_____	_____	_____
next year <u>20</u>	_____	_____	_____	_____
5 year <u>20</u>	_____	_____	_____	_____

2. Customers:  
estimated population \_\_\_\_\_ (19\_\_ year)  
names of municipalities served \_\_\_\_\_

3. Per Capita Use  
To produce standardized data, please use the following methods of calculation, using data from the years identified under B.1 - Demand.

Average use = total annual pumpage in gallons ) 365 days ) number of people served.

Minimum use = minimum month pumpage (gal.) ) days in month ) number of people

Maximum use = peak month pumpage (gal.) ) days in month ) number of people

	Current year <u>19</u>	Last year <u>19</u>
Average	_____	_____
Minimum	_____	_____
Maximum	_____	_____

Calculation based on: (circle one)  
total pumpage                      residential use only

4. Management of Peaks: (describe approach)

\_\_\_\_\_  
\_\_\_\_\_

5. Projections of Growth:      Service Connections

new in past year	_____
expected this year	_____
projected 5 year	_____

#### C. UNACCOUNTED-FOR WATER

##### 1. Leak Detection & Repair Program

a. frequency of surveys (performed on a regular schedule, as conditions require, etc.) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

b. miles of mains surveyed per year \_\_\_\_\_  
valves tested \_\_\_\_\_  
hydrants tested \_\_\_\_\_

c. methods employed \_\_\_\_\_

\_\_\_\_\_

d. equipment used \_\_\_\_\_

\_\_\_\_\_

e. equipment owned/rented/borrowed/consultant employed

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2. Leak Repair Activities (for last calendar year)

- a. leaks detected:
- |          | number | size  | repaired |
|----------|--------|-------|----------|
| mains    | _____  | _____ | _____    |
| valves   | _____  | _____ | _____    |
| hydrants | _____  | _____ | _____    |
- b. estimate of water saved \_\_\_\_\_
- c. manpower/equipment available to make repairs
- 

3. Long-range plans to reduce unaccounted-for water (for example, over the next three years) \_\_\_\_\_

4. Service Meter Repair/Replacement Procedures

- a. regular schedule or as needed basis \_\_\_\_\_
- b. average age of meters in use \_\_\_\_\_
- c. approximate number of direct read \_\_\_\_\_
- remote read \_\_\_\_\_

5. Calculate Unaccounted-for Water, past two years - DO NOT INCLUDE ANY ESTIMATED WATER USE.

$$100 - \frac{\text{gallons of water billed}}{\text{gals. of water entering dist. system}} \times 100 = \% \text{ unacc't}$$

$$100 - \frac{\text{_____}}{\text{_____}} \times 100 = \text{_____} \% (19 \text{ __})$$

$$100 - \frac{\text{_____}}{\text{_____}} \times 100 = \text{_____} \% (19 \text{ __})$$

6. Estimate water supply used for fire fighting and unmetered municipal buildings. \_\_\_\_\_ mgy

D. WATER RATES

1. Attach a copy of your rate schedule or a summary of it.
  2. Note any planned or proposed changes in rates.
  3. Meter reading and billing schedule - \_\_\_\_\_
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E. PUBLIC EDUCATION/AWARENESS

List efforts undertaken to date and those planned:

1. Assess public awareness of local and regional water supply problems.  

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2. Describe and/or include samples of information distributed to water users.  

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3. Describe activities undertaken in the past 3 years to meet with environmental committees and watershed associations to explore the concept of water conservation education.  

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4. Describe the assistance given to schools and civic organizations to promote the best use of local water resources.  

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II. DROUGHT OR WATER SUPPLY EMERGENCY MANAGEMENT COMPONENTS

A. Management of Localized Water Supply Problems

1. Storage, backup supplies, equipment and interconnections on standby status:  

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NOTE: The following section refers to local restrictions, which may be voluntary or mandatory, as decided by local officials when necessary, to manage local shortages only. The restrictions that apply when a drought emergency is declared by the Governor are not to be included here.

2. List ordinances that have been adopted to promote water conservation and provisions for their enforcement:  

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3. Indicate which of the above ordinances are implemented during the following local conditions:

- a. Drought warning \_\_\_\_\_
- b. Drought emergency \_\_\_\_\_
- c. Precipitation deficits \_\_\_\_\_
- d. Reservoir storage deficits \_\_\_\_\_

4. Distribution of water conservation devices/  
retrofit program/rebate program: \_\_\_\_\_

\_\_\_\_\_

5. Regulations requiring reuse or recycling of water:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

B. Voluntary Transfers Via Interconnections

1. Describe conditions under which voluntary transfers of water into your system are made via existing interconnections:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. Describe existing interconnections and agreements for their use during temporary emergencies and during localized drought emergencies:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. Give schedule for exercising interconnections:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

C. Purveyors with Water Supply Reservoirs with Capacity over 2.0 Billion Gallons ONLY;

1. Attach a rule curve that can be used to establish storage level thresholds for your reservoir or note that there is one on file with the Bureau of Water Allocation.
2. Explain the management steps to be taken as drought conditions progress approaching drought warning or drought emergency levels of the rule curve.

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